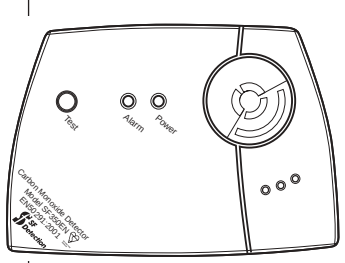
Instruction Manual SF350EN

SF Detection

Leading the way in Gas Detection



Carbon Monoxide Alarm

User Manual 2109M5015_4

EN50291:2001

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CAREFULLY READ AND UNDERSTAND THE CONTENTS OF THIS INSTRUCTION MANUAL BEFORE USING THE DETECTOR. RETAIN THE MANUAL IN A SAFE PLACE FOR FUTURE REFERENCE.

PAY PARTICULAR ATTENTION TO THE SAFETY WARNINGS. PASS THE MANUAL ONTO ANY SUBSEQUENT USERS OF THE DETECTOR.

WARNING

THIS CARBON MONOXIDE DETECTOR MAY NOT PROTECT PEOPLE WHO ARE AT SPECIAL RISK FROM CARBON MONOXIDE EXPOSURE BY REASON OF AGE, PREGNANCY OR MEDICAL CONDITION. IF IN DOUBT, CONSULT YOUR MEDICAL PRACTITIONER.

This Carbon Monoxide Detector is NOT

- A substitute for either a smoke alarm or a combustible gas detector.
- To be seen as a substitute for the proper servicing of fuel-burning appliances or the sweeping of chimneys.
- To be used on an intermittent basis, or as a portable detector for the spillage of combustion products from fuel-burning appliances or chimneys.

CAUTION

This carbon monoxide detector is designed for indoor use only. Do not expose to rain or moisture. Do not knock or drop the detector.Do not open or tamper with the detector as this could cause malfunction.
The detector will not protect against the risk of carbon monoxide poisoning when the battery has drained.

IMPORTANT

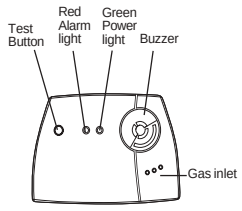
- Carbon Monoxide is produced by the incomplete combustion of fuels such as wood, charcoal, coal, heating oil, paraffin, petrol, natural gas, propane, butane etc.
- Ideally, it is recommended that a carbon monoxide detector should be installed in or near to every room that has a fuel burning appliance such as any gas fires, central heating boiler, room heaters, water heaters, cookers, grills, etc.
- This detector should only be installed by a competent person.
- Ensure that the detector alarm can be heard by all those who are intended to hear it.
- Seek medical help if it is suspected that a member of the household is suffering from carbon monoxide poisoning.

If further details are required which do not appear in this manual, contact SF Detection.

This pack contains: *One detector*
One fixing kit
One instruction manual

INTRODUCTION

Thank you for purchasing this detector which is designed to detect the presence of carbon monoxide. This manual contains information on the installation and operation of the gas detector.



The green power light flashes at approximately 1 minute intervals to indicate that the detector is operating correctly. The red alarm light will flash continuously and the buzzer will sound if carbon monoxide is present.

The detector is suitable for use in areas where cooking and heating appliances burn fuels such as wood, charcoal, coal, coke, oil, petrol, gas, etc.

WHAT IS CARBON MONOXIDE?

Carbon monoxide (CO) is a highly poisonous gas which is released when fuels are burnt. It is invisible, has no smell and is therefore very difficult to detect with the human senses. The first warning symptoms that CO is present in the air are usually headaches and nausea. Under normal operating conditions, in a room where fuel-burning appliances are well maintained and correctly ventilated, the amount of carbon monoxide released into the room by the appliances is not dangerous. A dangerous quantity of carbon monoxide can occur if one or more of the following conditions exists:

1. An appliance is faulty or is badly maintained.
2. A flue is partially or totally blocked.
3. A room is not adequately ventilated.

EFFECTS OF CARBON MONOXIDE POISONING

Carbon monoxide binds to the haemoglobin in the blood and reduces the amount of oxygen being circulated in the body.

200ppm	Slight headaches, tiredness, dizziness, nausea after 2-3 hours.
400ppm	Frontal headache within 1-2 hours, life threatening after 3 hours.
800ppm	Dizziness, nausea and convulsions within 45 minutes. Unconsciousness with 2 hours. Death within 2-3 hours.
1600ppm	Headache, dizziness and nausea within 20 minutes. Death within 1 hour.
6400ppm	Headache, dizziness and nausea within 1-2 minutes. Death within 10-15 minutes.

POSITIONING THE DETECTOR

1. Detectors located in the same room as a fuel-burning appliance

- If the detector is located on the wall it should be located at a height greater than the height of any door or window but at least 150mm from the ceiling. If the detector is mounted on the ceiling it should be at least 300mm from any wall.
- The detector should be at a distance of between 1m and 3m from the potential source.
- If there is a partition in a room, the detector should be located on the same side of the partition as the potential source.
- In rooms with sloped ceilings, the detector should be located at the high side of the room.

2. Detectors located in sleeping rooms and in rooms remote from a fuel burning appliance

- Detectors should be located relatively close to the breathing area of the occupants.

WHERE NOT TO PUT THE DETECTOR

Do not place the detector in the following areas:

- Outside the building.
- In or below a cupboard.
- In a damp or humid area.
- Directly above a sink or cooker.
- Next to a door or window or anywhere that would be affected by draughts, eg, extractor fan or air vent.
- Where the air flow to the detector would be obstructed by curtains or furniture.
- Where dirt or dust could collect and block the sensor, and stop it working.
- In an area where the temperature could drop below -10˚C or rise to above 40˚C.
- Where it could be easily knocked, damaged, or where it could be inadvertently removed.

IN WHICH ROOM TO PUT THE DETECTOR

Ideally, a detector should be fitted in every room that contains a fuel-burning appliance. However, if there is more than one appliance and the number of detectors is limited, the following points should be taken into consideration when deciding on the best location:

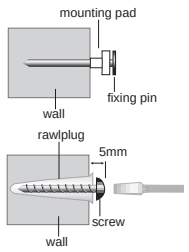
- If there is an appliance in a room where people sleep, a detector should be placed in that room.
- A detector should be located in a room containing a flueless or open-flued appliance
- If there is an appliance in a room which people use a lot, such as a sitting room, a detector should be placed in that room.
- In a bedsit, the detector should be placed as far away from the cooking appliance as possible but near to where the person sleeps.
- If the appliance is in a room not normally used, such as a boiler room, the detector should be placed just outside the room so that the alarm will be heard more easily

INSTALLING THE DETECTOR

The detector can either be used as a free-standing unit or can be wall mounted using the fixings provided.

WALL MOUNTING INSTALLATION

Find a position to install the detector (see“where to put the detector” and “where not to put the detector”).



Option 1
Special Mounting Pad with Fixing Pin (supplied)
Place the fixing pin through the mounting pad. Using a hammer, gently knock the fixing pin into the wall ensuring that the mounting pad is not hammered too firmly into the wall.

Option 2
Screw and Rawlplug (NOT supplied)
If the wall is too hard to use the fixing pin, use a No. 4 round head screw and rawlplug.

Once activated and tested (see “using the detector”), the detector can be hung on the protruding fixing pin using one of the ‘keyholes’ on the back.

OPERATION OF THE DETECTOR

	Green power light	Red alarm light	Buzzer	
Normal Operation When no carbon monoxide is present, the green power light will flash approximately once every minute.	☼	☾	🔕	1 per minute
Alarm Condition When the unit detects carbon monoxide, it will give the **alarm signal** continuously. The red alarm light will flash and the buzzer will sound approximately 5 times per second.		☼	🔊	5 per 1 second
When the detector has been in alarm for 30 minutes the **alarm signal** will be given once every minute.		☼	🔊	5 per 1 second per minute
Alarm Signal The carbon monoxide alarm can be distinguished from smoke detector alarms as it signals C.O. in morse code (5 per second).		☼	🔊	(_•_•_ _ _) c o
Hush Feature If required, the audible alarm can be silenced for 5 minutes by pushing the button marked 'Test'. The red alarm light will continue to flash 5 times per second.		☼	🔕	5 per 1 second
If carbon monoxide is still present after the 5 minute hush period, the audible alarm will sound.		☼	🔊	5 per 1 second
NOTE: The hush facility will not operate at levels above 350ppm carbon monoxide. At levels below 350ppm the hush facility will only operate once, ie the audible alarm can only be silenced for one 5 minute period.				
Return to Normal Operation When the carbon monoxide gas disperses, the alarm signal will stop. The green power lamp will continue to flash approximately once every minute.	☼	☾	🔕	1 per minute
Fault Warning If a fault is detected the buzzer will sound 2 short chirps every minute. The detector must then be replaced.		☾	🔊	2 per minute
Battery Fault Warning The buzzer will sound 1 short chirp every minute.		☾	🔊	1 per minute
End of Detector Life Warning When the unit comes to the end of its life the buzzer will sound 3 short chirps every minute. The detector must then be replaced.		☾	🔊	3 per minute

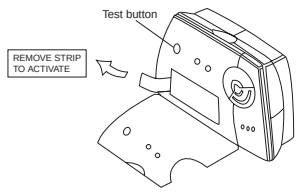
NOTE: with normal use the batteries will last the full 5 years life of the detector. However, battery life will be reduced if either a fault occurs with the battery or the detector remains in alarm for long periods of time.

Should the Battery Fault Warning occur please contact your detector supplier.

USING THE DETECTOR

To activate the detector, open the front flap and pull out the activation strip. The green and red lights will flash briefly and the buzzer will sound a short chirp.

Press the test button and check that the red light flashes and the buzzer sounds. Close the front flap. The detector is now operating and is ready for use.



TESTING YOUR CARBON MONOXIDE ALARM

The detector should be tested monthly by pressing and holding the test button on the front of the unit for 5 seconds. If the unit is functioning correctly, the green light will stay illuminated, the red light will flash and the alarm will sound.

SPECIFICATION

Model:	SF350EN
Gas Detected:	Carbon monoxide
Detection Principle:	Electro-chemical cell
Alarm Indication:	Flashing red light and audible alarm
Alarm Levels:	50ppm Between 60 to 90 mins 100ppm Between 10 to 40 mins 300ppm Less than 3 mins
Operating Temperature:	-10˚C to 40˚C
Humidity Range:	30 to 90% RH
Warm-up time after initial switch on:	Instantaneous
Normal Operating Life:	5 years
Battery life when in alarm:	At least 5 days
Dimensions:	110mm x 76mm x 34mm
Weight:	Approximately 140g

CARE AND MAINTENANCE OF DETECTOR

The carbon monoxide gas detector is pre-calibrated at the factory and requires no maintenance other than to clean the outside case occasionally with a clean tissue. Ensure that the holes on the front of the detector are not blocked with dust or dirt. DO NOT USE CLEANING AGENTS, BLEACH OR POLISH.

END OF DETECTOR LIFE

During operation, the detector carries out a self-check test every minute.

The detector will operate for 5 years under normal use. The detector must be replaced when either the **End of Detector Life Signal** is given (buzzer sounds 3 short chirps every minute) or the test button does not work.

DISPOSAL

When the detector has come to the end of its life, dispose of the unit in accordance with local regulations.

WHAT TO DO WHEN THE ALARM SOUNDS

If the detector raises an alarm, proceed as follows:

- Open all doors and windows to ventilate the area and allow the carbon monoxide to disperse.
- Where possible turn off all fuelled appliances and stop using them.
- Evacuate the property leaving the doors and windows open.
- Ring the gas or other fuel supplier on their emergency number and explain the problem. Keep the telephone number in a prominent place.
- Do not re-enter the property until the alarm has stopped.
- Get medical help immediately for anyone suffering from the effects of carbon monoxide poisoning such as headaches, nausea, etc. and advise that carbon monoxide poisoning is suspected.
- Do not use the fuel burning appliances again until they have been checked and cleared for use by a competent person according to national regulations.

DISCLAIMER

This carbon monoxide detector is designed to alert you to a potentially dangerous build-up of carbon monoxide gas. It is not designed to remedy a carbon monoxide problem nor to locate a specific source of carbon monoxide. SF Detection shall not be liable to pay for any carbon monoxide investigation or service call carried out or arranged in response to an alarm.

GUARANTEE

We guarantee your new gas detector for five years from the date of purchase and under normal use and service, to be free from defects in materials and workmanship. During this period we will, at our discretion, repair, replace of refund the price of any part of the gas detector which is found to be defective in either materials or workmanship providing this occurs under normal use and service. We shall, however, be under no obligation to repair, replace or refund the price of units which are found to be defective in any way due to damage, neglect, unreasonable use or which have been tampered with or found to have been dismantled. Defective units should be returned, in suitable packaging, along with proof of purchase to

SF Detection, 4 Stinsford Road, Nuffield Industrial Estate, Poole, BH17 0RZ.

An accompanying letter should state clearly any problem with the gas detector. This guarantee does not affect your statutory rights.

SF Detection
4 Stinsford Road
Nuffield Industrial Estate
Poole
Dorset BH17 0RZ

Tel: (44) 01202 645577
Fax: (44) 01202 665331

Email: sales@sfdetection.com
Website: www.sfdetection.com